

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

Claims 1 to 17. (Canceled).

18. (New) A run-in coating for a gas turbine, comprising:  
an intermetallic titanium-aluminum material adapted to be applied to a housing of the gas turbine and adapted to seal a radial gap between the housing of the gas turbine and rotatable rotor blades of the gas turbine.

19. (New) The run-in coating according to claim 18, wherein the run-in coating includes at least one of (a) a stepped and (b) a graded at least one of (a) a composition and (b) a porosity.

20. (New) The run-in coating according to claim 18, wherein the run-in material is less porous at a region facing the housing than at a region facing the rotor blades.

21. (New) The run-in coating according to claim 18, wherein the run-in coating is less porous at an inner region arranged directly adjacent to the housing and at an outer region arranged directly adjacent to the rotor blades than between the inner region and the outer region.

22. (New) The run-in coating according to claim 18, wherein a ratio of titanium to aluminum in the run-in coating is approximately constant, exclusively a porosity adapted to set at least one of (a) a density, (b) a hardness and (c) a density of the run-in coating one of (a) stepped and (b) graded.

23. (New) The run-in coating according to claim 18, wherein a ratio of titanium to aluminum in the run-in coating is one of (a) stepped and (b) graded, the run-in coating including more aluminum at a region facing the rotor blades than at a region facing the housing.

24. (New) The run-in coating according to claim 18, wherein the housing is formed of an intermetallic titanium-aluminum material.

25. (New) The run-in coating according to claim 24, wherein the run-in coating is directly applied onto the housing.

26. (New) A gas turbine, comprising:  
a housing;  
rotatable rotor blades; and  
a run-in coating including an intermetallic titanium-aluminum material applied to the housing and adapted to seal a radial gap between the housing and the rotor blades.

27. (New) A method for producing a run-in coating for a gas turbine, comprising:  
applying the run-in coating onto a housing of the gas turbine to seal a radial gap between the housing and rotatable rotor blades of the gas turbine, the run-in coating including an intermetallic titanium-aluminum material.

28. (New) The method according to claim 27, wherein the run-in coating is applied in the applying step to have one of (a) a stepped and (b) a graded at least one of (a) a material composition and (b) a porosity.

29. (New) The method according to claim 27, wherein the run-in coating is applied in the applying step to be less porous at a region facing the housing than at a region facing the rotor blades.

30. (New) The method according to claim 27, wherein the housing is formed of an intermetallic titanium-aluminum material.

31. (New) The method according to claim 27, wherein the applying step includes applying at least one layer of a titanium-aluminum slip material onto the housing and subsequently hardening the titanium-aluminum slip material by baking.

32. (New) The method according to claim 31, wherein additives are intercalated into each layer of the titanium-aluminum slip materials, the additives evaporated during baking and leaving behind pores within each layer of the run-in coating.

33. (New) The method according to claim 27, 31, wherein each layer of the titanium-aluminum slip material is applied in the applying step by at least one of (a) brushing, (b) dipping and (c) spraying.

34. (New) The method according to claim 27, wherein the applying step includes applying at least one titanium-aluminum layer onto the housing by at least one of (a) a directed vapor jet and (b) a PVD jet and subsequently hardening each layer by baking.

35. (New) The method according to claim 34, wherein the applying step includes feeding additives into the jet shortly before impinging of the jet, the additives evaporated during baking and leaving behind pores in each layer of the run-in coating.